C L A I M S

1. Method to increase the cetane number of a gas oil product based on a petroleum derived gas oil to a target cetane number Y by adding to the petroleum derived gas oil an amount of a Fischer-Tropsch derived gas oil having a higher cetane number, B, than the petroleum derived gas oil of cetane number, A, wherein the amount of added Fischer-Tropsch derived gas oil is less than the amount which would be added if linear blending is assumed.

2. Method according to claim 1, wherein the volume fraction of Fischer-Tropsch gas oil is less than x, wherein x is the volume fraction that would be added if linear blending assumptions would have been made according to the following equation:

$$Y = A + x(B-A),$$

3. Method according to any one of claims 1 or 2, wherein a volume fraction x is added as Fischer-Tropsch derived gas oil in order to increase the cetane number to target value Y, wherein Y and x are related according to the following equation:

$$Y = A + (B-A)(-px^2 + qx),$$

where p and q are constants such that $1.4 > q > 1.9$ and $p = q-1$ and wherein A is the cetane number of the petroleum derived gas oil and B the cetane number of the Fischer-Tropsch derived gas oil.

4. Method according to claim 3 wherein, x is greater than 0.02 and less than 0.7.

5. Method according to claim 4, wherein x is less than 0.5.

6. Method according to any one of claims 1-5, wherein the cetane number, A, of the petroleum derived gas oil is greater than 40 and less than 70.

7. Method according to any one of claims 1-6, wherein the cetane number of the petroleum derived gas oil is measured by making use of near infrared spectroscopy.

8. Gas oil product comprising a gas oil blend as obtained by the method according to any one of claims 1-7, one or more additives, less than 500 ppmw sulphur and having a density of less than 0.86 g/cm^3 at 15 °C.